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Swamp vegetation in Japan.—A study of the vegetation of a shallow lake by NAKANO³⁴ is probably the first ecological investigation to be reported from Japan. The lake represents an ox-bow of the River Tone, and is surrounded by a swamp formation consisting of four concentric zones about the central association of submerged plants, among which various species of *Potamogeton* predominate. The succeeding associations are characterized by *Zizania aquatica*, *Typha angustifolia*, *Phragmites communis*, and *Sagittaria sagittifolia* respectively. The author decides from an analysis of the swamp flora that its closest alliance is with that of China, with 67 per cent of common species; the dominant species, however, are mostly common to North America, although the analysis shows only 27 per cent of common species. The only endemic plant is *Potamogeton lucens* var. *teganumensis*.—GEO. D. FULLER.

Mycorrhiza of Solanums.—Seeking for data which could be related to his hypothesis of tuberization being caused by fungal infection, BERNARD³⁵ had begun the investigation of the various species of *Solanum* for the presence of endophytic fungi when death interrupted his labors. He found, however, that such fungi were present in the rootlets of older plants of *Solanum Dulcamara*, and in the roots of the probable ancestor of the cultivated potato, *S. Maglia*. The latter showed the presence of mycorrhiza only when growing under natural conditions, being entirely free from infection as cultivated in botanic gardens and elsewhere in Europe. These results are suggestive of the possible effects of cultivation upon the fungi present in the tubers of the potato, and of their possible influence upon the evolution of tuberization as it now exists in the potato.—GEO. D. FULLER.

Vascular connections of sporocarp of Marsilea.—Ever since the “fertile spike” of Ophioglossaceae has been removed by CHRYSLER and others from the category of an adaxial sporangiophore to that of fused lateral pinnae, the adaxially stalked sporocarp of the Marsileaceae has been a suggestive situation. CHRYSLER studied *Marsilea quadrifolia* and found the vascular connections of the sporocarp stalk to be the same in kind as those of the fertile spike in Ophioglossaceae. Miss ALLISON³⁶ has now added *M. polycarpa*, in which the petiole bears a varying number of sporocarps, which arise acropetally. She finds that the vascular connections are just as in *M. quadrifolia*, and indicate that the sporocarps are fertile lobes of the leaf. She found also the same condition in *Pteris semipinnata*, a species with pinnules on one side only of the pinna.—J. M. C.

³⁴ NAKANO, H., The vegetation of the lakes and swamps in Japan. I. Teganuma. Bot. Mag. Tokyo **25**: 35-51. figs. 6. 1911.

³⁵ BERNARD, NOEL, Les mycorhiza des Solanums. Ann. Sci. Nat. Bot. IX. **14**: 235-257. 1911.

³⁶ ALLISON, HARRIET E., Note on the vascular connections of the sporocarp in *Marsilea polycarpa* Hook. and Grev. New Phytol. **10**: 204-206. pl. 3. 1911.